Federal Aviation Administration

MMEL Policy Letter 121, Revision 0

Date:	September 06, 2007
To:	All Region Flight Standards Division Managers All Aircraft Evaluation Group Managers
From:	Manager, Air Transportation Division, AFS-200
Reply to Attn of:	Manager, Technical Programs Branch, AFS-260

SUBJECT: (EFB) Electronic Flight Bag

MMEL CODE: 46 (INFORMATION SYSTEMS)

REFERENCE:

PURPOSE:
The purpose of this policy letter is to establish guidelines for Master Minimum Equipment List (MMEL) relief for Electronic Flight Bags (EFB).

DISCUSSION:

Revision Original: Provides MMEL guidance for installed Electronic Flight Bags and associated software applications. Recent industry requests have identified the need for standardizing MMEL relief for Electronic Flight Bags. There are currently numerous retrofitted EFBs available to operators. This policy letter is meant to standardize relief to incorporate retrofitted installations as well as manufacturer installed Electronic Flight Bags.

FAA Advisory Circular 120-76A contains current information and guidance relating to the definition and certification of Electronic Flight Bags and their software applications, as well as an AEG requirement to publish an FSB report for Class 2 & 3 and Type B and C software applications. The FAA N8200.98, Electronic Flight Bag Job Aid also provides guidance to the FOEB Chairmen and CHDO Managers concerning EFB information for review during the EFB MMEL/MEL approval process.

This Policy Letter is written to give the FOEB Chairmen and CHDOs guidance related to inserting relief for Electronic Flight Bags into the MMELs and individual operator's MELs.

EFB systems having Class 1 hardware are generally commercial-off-the-shelf (COTS) based computer systems used for aircraft operations, are portable, are not attached to an aircraft mounting device, are considered as Portable Electronic Devices (PEDs) such as PDAs (Personal Data Assistants), tablet PCs (portable tablet computers), laptop computers, etc., may connect to ship's power and/or obtain read-only data through a certified power/data source, and, if using only a Type A software application, are not required to go through an administrative control process for use on an aircraft.

EFB systems having Class 2 hardware are generally COTS based computer systems used for aircraft operations, are portable, are considered a PED, are required to go through an administrative control process to add, remove, or use in the aircraft, and are attached by means of a mounting device either

directly to the aircraft (albeit removable) or by use of devices such as a knee-board, cradle, docking-station, etc. These devices may connect to ship's power and/or obtain read-only data through a certified aircraft power/data source.

EFB systems having Class 3 hardware are mounted and electrically connected to the aircraft as permanently installed equipment and require Aircraft Certification Service (AIR) design approval. These devices may be connected to essential and/or critical aircraft data busses and may be used for other aircraft data communication applications.

Type A software applications are pre-composed, fixed presentations of data that are also currently presented in paper format. These software applications may consist of manuals relating to the operation of the aircraft including an operator's MEL. Additional examples of Type A software applications may be found in AC 120-76A, Appendix A.

Type B software applications include dynamic, interactive applications that can manipulate data and presentation. These applications may consist of terminal charts, electronic logbook, electronic weight & balance, aircraft performance data including calculation capability for takeoff, enroute, and landing operations, electronic checklists, air to ground data links, aeronautical weather data, etc. Additional examples of Type B software applications may be found in AC 120-76A, Appendix B.

Type C software applications may include primary flight displays, TCAS, ADSB, moving map displays, own-ship position, etc. These applications require AIR design approval unless the software is user modifiable, which may be utilized to host Type A or B applications.

The purpose of this Policy Letter is not to exclude Class 1 & 2 EFBs from the operator's MELs. If desired, relief for Class 1 & 2 EFBs may be negotiated with an operator's CHDO for inclusion as Administrative Control Items in that operator's MEL.

POLICY:

This policy letter specifically addresses relief for Class 3 EFBs and mounting devices, data connectivity, and power connections associated with Class 1, and 2 EFBs

The following standard MMEL proviso and repair category is adopted to provide standardization among all MMELs.

46 (INFORMATION SYSTEMS)

***	Electronic Flight Bag Systems (EFBs)				
****	Class 3 EFBs	C	-	-	(O) May be inoperative provided alternate procedures are established and used. NOTE: Any function, program or document which operates normally may be used.
		D	-	0	May be inoperative provided procedures do not require its use.
****	Data Connectivity (Class 2)	C	-	-	(O) May be inoperative provided alternate procedures are established and used.

		D	-	0	May be inoperative provided procedures do not require its use.
****	Power Connection (Class 1 & 2)	C	-	-	(O) May be inoperative provided alternate procedures are established and used.
		D	-	0	May be inoperative provided procedures do not require its use.
****	Mounting Device (Class 2)	C	-	0	(M) (O)May be inoperative provided: a) Associated EFB and hardware is secured by an alternate means or removed from the aircraft, b) Alternate procedures are established and used.
		D	-	0	(M) May be inoperative provided: a) Associated EFB and hardware is secured by an alternate means or removed from the aircraft, b) Procedures do not require its use.

Each Flight Operations Evaluation Board (FOEB) Chairman should apply this Policy to affected MMELs through the normal FOEB process.

Thomas Toula, Manager,
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PL-121 reformatted 02/04/2010 with no change in policy.